Sheikhi et al. BMC Psychology (2020) 8:82
https://doi.org/10.1186/s40359-020-00450-0

BMC Psychology

RESEARCH ARTICLE Open Access

The effect of eye movement desensitization and reprocessing on the fear of hypoglycemia in type 2 diabetic patients: a randomized clinical trial

Mohammadreza Sheikhi[1], Mohamad Moradi[2], Saeed Shahsavary[3], Zainab Alimoradi[4] and Hamid Reza Salimi[5*]

Abstract

Background: The fear of hypoglycemia leads to psychological symptoms in patients with diabetes type 2. In this research, the effects of EDMR on the fear of hypoglycemia in patients with diabetes type 2 were examined.

Methods: A clinical trial study was carried out with participation of 72 patients who had diabetes type 2 in Velayat Hospital. The participants were randomly assigned into control and intervention groups. The intervention group received EMDR. The required information was gleaned using a questionnaire of fear of hypoglycemia, intensity of hypoglycemia, and demographics filled out before the intervention, and 1 month and 3 months after it. The data were analyzed using descriptive statistics on SPSS Version 23. For comparison of fear of hypoglycemia in intervention and control groups, repeated measure ANOVA and Cohen d test were used.

Results: The mean age of the participants in the intervention group was 43.17 ± 10.55 and in the control group was 45.86 ± 13.6. In this study, without considering the potential disruptors in the incorrect model, the intervention caused a reduction of 15 points 1 month after the completion of the intervention and a reduction of 17 points 3 month after the completion of the intervention on the scale of fear of hypoglycemia; but post-correction of potential disruptors, intervention caused a reduction of 19.5 scores 1 month after the completion and a reduction of 20.3 scores 3 months after the intervention .

Conclusions: The EMDR can be used as a non-pharmaceutical treatment method to treat and alleviate the fear of hypoglycemia in type 2 diabetes patients.

Trial registration: Iranian Registry of Clinical Trials: IRCT20181201041813N1, 2019/11/13.

Keywords: EMDR, Fear of hypoglycemia, Patients with diabetes type 2

Background

Diabet Mellitus is a chronic and complicated disease that requires permanent medical cares and strategies to attenuate the risk of recurrence of many side-effects [1]. The primary goal in the management of diabetic patients is to maintain blood glucose levels at normal or near normal ranges using oral anti-diabetic tablets and insulin therapy [2]. Extensive therapy, especially insulin therapy, can increase the incidence of hypoglycemia, which is one of the most common and unpredictable effects of insulin therapy [3]. Hypoglycemia is common in type 2 diabetic patients. According to the study by Gehlaut et al. [4], at least 49.1% of patients; and according to the study conducted by Lamounier et al. [5],61.8% of patients had experienced hypoglycemia. In some

* Correspondence: hamidrezasalimi1995@yahoo.com
[5]Qazvin University of Medical Sciences, Qazvin, Iran
Full list of author information is available at the end of the article